

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.weylo.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|--------------------------------|----------------------|--|------------------|
| 10/596,637 | 06/19/2006 | Max Wyssmann | 699/44979 | 8639 |
| 23646 BARNES & T | 7590 09/10/201 HORNBURG LLP | 0 | EXAM | IINER |
| 750-17TH STREET NW | | | CARPENTER, WILLIAM R | |
| SUITE 900 WASHINGTO | N, DC 20006-4675 | | ART UNIT | PAPER NUMBER |
| | | | 3767 | |
| | | | NOTE IN THE LEGISLAND AND ADDRESS OF THE LEGI | DEL HEDVI CODE |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 09/10/2010 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

vrobertson@btlaw.com DocketingPAT-DC@btlaw.com

Office Action Summary

| Application No. | Applicant(s) | |
|-------------------|---------------|--|
| 10/596,637 | WYSSMANN, MAX | |
| Examiner | Art Unit | |
| WILLIAM CARPENTER | 3767 | |

| earned patent term adjustment. | See 37 CFR 1.704(b). | - | |
|--------------------------------|----------------------|---|--|
| | | | |

| | | WILLIAM CARPENTER | 3767 | |
|--|---|---|--|-------------|
| | The MAILING DATE of this communication app | ears on the cover sheet with the c | orrespondence ad | ldress |
| WHICH - Extens after S - If NO; - Failure Any re | PREPLY DISTRIBUTION OF PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DA loss of time may be available under the provisions of 37 CFR 1.3 kt, 69 MONTHS from the mailing date of the communication period for reply is specified above, the maximum statutory period to reply with the set or extended period for reply with 19 y statute, ply received by the Office later than three months after the mailing plantet term displament. See 37 CFR 1.70(46). | TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | I. lely filed the mailing date of this c (35 U.S.C. § 133). | |
| Status | | | | |
| 2a)⊠ 3 3)□ 3 | Responsive to communication(s) filed on <u>13 M</u> This action is FINAL . 2b) ☐ This Since this application is in condition for allowan | action is non-final. ce except for formal matters, pro | | e merits is |
| Dispositio | on of Claims | | | |
| 5)□ (6)図 (7)□ (| Claim(s) 1.3.4.9-12.21 and 22 is/are pending in a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) is/are allowed. Claim(s) 1.3.4.9-12. and 21-22 is/are rejecter claim(s) is/are objected to. Claim(s) are subject to restriction and/or | vn from consideration. | | |
| Application | on Papers | | | |
| 10)□ T | The specification is objected to by the Examiner he drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the capelacement drawing sheet(s) including the correctific oath or declaration is objected to by the Examination of the control of t | epted or b) objected to by the E drawing(s) be held in abeyance. See on is required if the drawing(s) is obj | 37 CFR 1.85(a). ected to. See 37 C | |
| Priority u | nder 35 U.S.C. § 119 | | | |
| a)[| acknowledgment is made of a claim for foreign All b) Some * c) None of: Certified copies of the priority documents Certified copies of the priority documents Copies of the certified copies of the priority application from the International Bureau tee the attached detailed Office action for a list of | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)). | on No ed in this National | Stage |
| | | | | |
| Attachment(| s) of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | |

| Attachment(s) | | |
|--|---|--|
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/06) Paper No(s)Mail Date | 4) Interview Summary (PTO-413) Paper No(s)Mail Date. 5) Notice of Informat Potent Application 6) Other: | |

Page 2

Application/Control Number: 10/596,637

Art Unit: 3767

DETAILED ACTION

Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148
 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - Resolving the level of ordinary skill in the pertinent art.
 - Considering objective evidence present in the application indicating obviousness or nonobviousness.
- Claims 1, 3, 9, 10, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,741,275 ("Wyssmann") in view of US Patent No. 4,743,479 ("Nakamura") and US Publication No. 2002/0087125 ("Pokorney").

Regarding Claims 1, 9, and 10, Wyssmann discloses a device (Fig. 10) for deliberate, controllable delivery or drawing of a lubricant (Abstract; Col. 1, Ln. 52 – Col. 2, Ln. 3).

Wyssmann discloses the device to comprise a cylindrical reservoir (91) having a piston (96) dividing the reservoir into a storage chamber (95) for the lubricant and a pressure chamber (94) for hydrogen gas, wherein the piston is positioned with the cylindrical reservoir to be moveable longitudinally within the cylindrical reservoir.

Application/Control Number: 10/596,637

Art Unit: 3767

Wyssmann discloses the storage chamber for the lubricant leads into a discharge opening (not labeled; generally 3).

Wyssmann discloses an insert (98) in the pressure chamber, the insert comprising at least one hydrogen gas generating cell and a circuit for the running time control (Col. 9, Ln. 28-65).

Wyssmann discloses the invention substantially as claimed except that cylindrical reservoir is formed of three layers, wherein the inner layer comprises transparent polyethylene terephthalate (PET), the central layer comprises polyamide, and the outer layer comprises transparent polyethylene terephthalate (PET), However, Nakamura discloses a container (1) that comprises three layers (11, 12, and 13) for providing a suitable liquid and gas vapor barrier. Nakamura discloses that the multilavered container may comprise polyethylene terephthalate (PET) within which an intermediate layer of a material, such as polyamide with superior vapor barrier properties (i.e. a lower diffusion coefficient) is provided (Col. 20, Ln. 28). As such, it would have been obvious for one having ordinary skill in the art at the time the invention was made to provide the container of the device of Wyssman to comprise a three-layered configuration composed of an inner layer of PET, an intermediate layer of polyamide having a lower diffusion coefficient, and an outer layer of PET, as disclosed by Nakamura, in order to impart the container with superior liquid and gas vapor barriers increasing the integrity of the seal of the container. It has been held that selecting a material based on its recognized suitability for a specific purpose requires only routine and customary skill in the art.

Art Unit: 3767

Nakamura discloses that the barrier properties of the multi-layered container are dependent on the relative thicknesses of the constituent lavers (Abstract), Nakamura discloses in specific embodiments that the intermediate layer comprises a thickness of 28, 39, or 41 micrometers with the total thickness of the wall to comprise thickness of 261, 268, and 276 for respective percentages of 11%, 15%, and 15% respectively (Example 1). However, Nakamura discloses that "the wall thicknesses of the inner layer 21 and the intermediate layer 22 can be adjusted from each other to enhance the gas barrier and heat resistant properties" (Col. 4, Ln. 64-67). As such, Nakamura clearly establishes the relative wall thickness of the constituent layers, including the relative thickness of the intermediate layer to be result effective variables. As such, it would have been obvious for one having ordinary skill in the art at the time the invention was made to provide the central/intermediate layer of the modified invention of Wyssmann to have a thickness of between 30 to 60 percent, more specifically between 40 and 50 % and specifically 45% of the entire wall, since it has been held that discovering the optimal or workable of a range of a result effective variable requires only routine and customary skill in the art. Only the expected results of optimizing the layer ratios to be impermeable to the specific fluids carried by the invention of Wyssmann, specifically hydrogen and lubricant would be accomplished.

Wyssmann fails to explicitly disclose that the device operates at counterpressures of over 5 bar, failing to explicitly disclose what pressures the hydrogen cell may be expected to generate in order to induce flow of the viscous lubricant. However, Pokorney discloses a syringe (Fig. 1) specially purposed to deliver

Application/Control Number: 10/596,637

Art Unit: 3767

highly viscous fluids (Par. 7 and Par. 41). In order to affect delivery of said materials Pokorney discloses that the syringe may be configured to generate pressures in excess of 100 psi (Par. 7; Par. 39; Par. 40). These pressures are in excess of Applicant's claimed 5 bar (72.5 psi) counterpressures. As such, it would have been obvious for one having ordinary skill in the art at the time the invention was made to configure the device of Wyssmann to utilize a hydrogen cell capable of producing pressures in excess of 5 bar, as disclosed by Pokomey, thereby only achieving the expected results of providing suitable pressures for delivering viscous fluids as is known in the art.

Regarding Claim 3, Nakamura discloses that the center layer consists of one of a solid material and a liquid which is transparent.

Regarding Claims 21 and 22, these claims are directed towards the method of making the multilayered wall. However, it has been found that the method of making an article of manufacture is not germane to the patentability of the article itself, and as such the precise method steps found in these claims have not been found to limit over the methods used to form a multilayered container such as that described by Nakamura.

4. Claims 4 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,741,275 ("Wyssmann"), US Patent No. 4,743,479 ("Nakamura"), and US Publication No. 2002/0087125 ("Pokorney") as applied to Claim 1 above, and further in view of US Patent No. 7,374,555 ("Heinz").

Regarding Claims 4 and 11-12, Wyssmann discloses that the invention may comprise a detachable closing device (not labeled; Fig. 4). However, Wyssmann fails to explicitly disclose that this closing device is molded thereto, specifically through the use

Art Unit: 3767

of breaking points. However, Heinz discloses a similar container (1) having a discharge opening (2) including a detachable closing device (18) molded thereto via a plurality of notched breaking points (19). It would have been obvious for one having ordinary skill in the art at the time the invention was made to provide the modified invention of Wyssmann with a notched removable closing device, as disclosed by Heinz, in order to provide one well-known type of sealing cap.

Response to Arguments

Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

Application/Control Number: 10/596.637

Art Unit: 3767

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM CARPENTER whose telephone number is (571)270-3637. The examiner can normally be reached on Monday through Thursday from 7:00AM-4:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571) 272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/596,637 Page 8

Art Unit: 3767

Examiner, Art Unit 3767 09/03/2010 (KEVIN C. SIRMONS/ Supervisory Patent Examiner, Art Unit 3767